

CA-1969-07

Bloom

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Fig. 1.

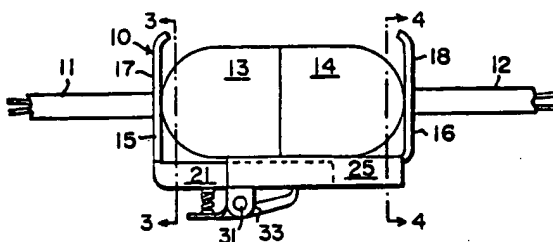


Fig. 2.

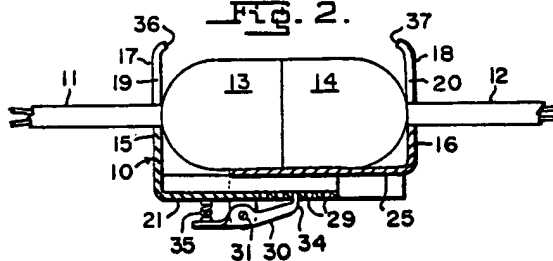


Fig. 3.

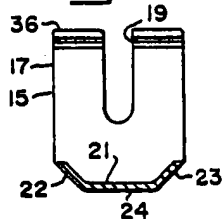


Fig. 4.

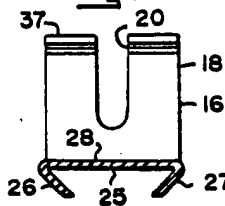


Fig. 5.

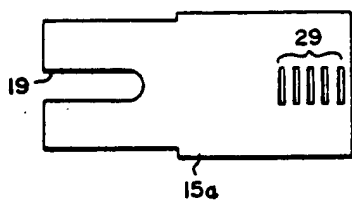
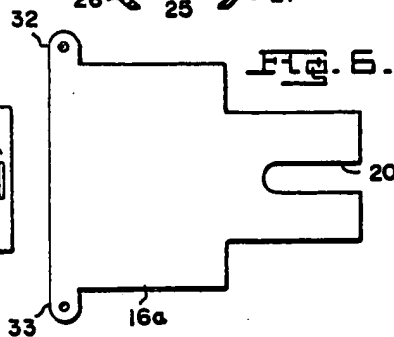


Fig. 6.

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⑪ CA No. 818,717

④5 ISSUED July 22, 1969

③2 CLASS 339-59
C.R. CL.

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CANADIAN PATENT

CANADA	350
GROUP	
CLASS	339

⑤4

EXTENSION CORD CLAMP

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②1

APPLICATION No. 992,759

②2

FILED June 12, 1967

③0

PRIORITY DATE

No. OF CLAIMS 4

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My invention relates to improvements in clamps for connected electrical cord terminals and an important object of my invention is to provide a clamp comprising slidably moveable components having ratchet and detent means serving to releasably fasten the components in any one of a plurality of set positions in order to hold various sizes of electric cord terminals in electrically connected relationship.

Another object of my invention is the provision of a
10 clamp as just described that may be economically produced by pressing or stamping out of flat steel strap material.

Other objects and advantages of my invention will become apparent during the course of the following detailed description taken in connection with the accompanying drawing, forming part of this specification, and in which drawing;

Fig. 1 is a view in side elevation of my electric cord terminal clamp and showing two connected electric cord terminals held together thereby.

20 Fig. 2 is a central vertical longitudinal sectional view of the clamp holding the cord terminals shown in Fig. 1.

Fig. 3 is a vertical cross sectional view of the clamp, taken substantially along the line 3-3 of Fig. 1 and looking in the direction of the arrows.

Fig. 4 is a vertical cross sectional view of the clamp, taken substantially on the line 4-4 of Fig. 1, and looking in the direction of the arrows.

Fig. 5 is a plan view of a sheet metal blank from
30 which one of the clamping components is made.



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Fig. 6 is a plan view of a sheet metal blank from which another component of the clamp is made.

In the drawing, which for the purpose of illustration, shows only a preferred embodiment of my invention and wherein like reference characters denote corresponding parts throughout the several views, the numeral 10 generally designates my improved electric extension cord connector terminal clamp, and 11, 12, two extension cords provided with suitable connectible terminals 13, 14 of the usual type that are releasable by pulling apart in directions lengthwise of the extension cords 11, 12. The clamp 10 comprises two L-shaped components 15, 16 respectively formed of sheet metal blanks 15a, 16a as shown in Figs. 5 and 6 and which are pressed or stamped partly into channel formation as shown in Figs. 3 and 4 and also into L-shaped formation as shown in Figs. 1 and 2. By these stamping operations, end portions 17, 18 are provided that serve as abutments for engagement against opposite ends of the electric cord terminals 13, 14, and which end portions have slots 19, 20 for receiving the extension cords 11, 12 adjacent the terminals 13, 14. One of the components 15 has a side channel 21 to which its integral end portion 17 is normal or perpendicular and which side channel includes outwardly divergent side flanges 22, 23 dihedrally disposed relative to a central web portion 24. The other component 16 has a side channel 25 to which its associated end portion 18 is normally or perpendicularly disposed, and which side channel 25 includes inwardly convergent side flanges 26, 27 in acute angular relationship to a central web portion 28.

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As shown in Figs. 1 and 2, the components 15, 16 of the clamp 10 are so designed that in their assembled relationship one of the side channels 21 is disposed within the other side channel 25 and the side flanges 26, 27 of the outer channel 25 slidably engage the side flanges 22, 23 of the inner channel 21 and retain the two components 15, 16 together, as well as guiding the movement of the components toward and away from each other. The central web portion 24 of the inner channel 21 is provided with a lengthwise-extending series 29 of the ratchet slots as shown in Figs. 2 and 5. Having ratcheting co-action with the series 29 of ratchet slots is a detent 30 pivotally connected as by a pin 31 to the outer channel side flanges 26, 27 at the integrally-formed projecting tabs 32, 33 shown in Figs. 1, 2 and 6. The detent 30 has a catch 34 at one end which is urged into engagement in any one of the series 29 of the ratchet slots by means such as an expansion coil spring 35. I prefer to shape the opposite ends 17, 18 of the clamp 10 as shown,- that is, with inturned end margins 36, 37 that will tend to prevent sideways escape of the cord terminals 13, 14 from the clamp 10.

In using my improved clamp, assuming that the two electric cord terminals 13, 14 are electrically connected together as shown in Figs. 1 and 2, the clamp 10 is associated with the two connected cord terminals by relative movement of the extension cords 11, 12 into the slots 19, 20 of the clamp end portions 17, 18 while the end portions 17, 18 are spaced apart a distance greater than the combined lengths of the two cord terminals 13, 14, this separation

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of the end portions 17, 18 being accomplished by release of the detent 30 and longitudinal sliding apart of the two components into the desired spacing.

Thereafter, the end portions 17, 18 are brought sufficiently close together to engage the opposite ends of the two connected cord terminals 13, 14. This clamping adjustment is accomplished by relative longitudinal sliding movement of the side channels of the two components while the detent is released. With the relationship of parts shown in Figs. 1 and 2, the electric cord terminals are held together by engagement of the detent in one of the series 29 of ratchet slots, this relieving strain on the cord terminals in the direction of the length of the cords that otherwise would tend to result in electrical disconnection of the cord terminals.